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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,507	08/31/2001	Shigekazu Ohtomo	520.40591X00	8177
20457	7590	05/12/2005	EXAMINER	
ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873			CHEN, TIANJIE	
			ART UNIT	PAPER NUMBER
			2652	

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,507

Applicant(s)

OHTOMO ET AL.

Examiner

Tianjie Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/24/2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-55 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 38-55 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Final Rejection

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 38-55 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Independent claims 38, 44, and 50 recite: "wherein the projection step portion includes one portion which faces the upper magnetic pole and another portion which is wider than the one portion at a predetermined depth from the air bearing surface and which does not face the upper magnetic pole, the another portion having a width which is wider than a width of the one portion of the projection step portion at the air bearing surface; wherein a distance from the air bearing surface to a starting position line of the another portion of the projection step portion is shorter than a distance from the air bearing surface to the air bearing surface side edge of the upper magnetic pole which faces the one portion of the projection step portion."

However, if "another portion which is wider than the one portion at a predetermined depth from the air bearing surface and which **does not face** the upper magnetic pole," then "a distance from the air bearing surface to a starting position line of the another portion of the projection step portion" **cannot be** "shorter than a

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distance from the air bearing surface to the air bearing surface side edge of the upper magnetic pole which faces the one portion of the projection step portion;" **it should be equal to or longer than** "a distance from the air bearing surface to the air bearing surface side edge of the upper magnetic pole which faces the one portion of the projection step portion." Therefore, any person skilled in the art to which it pertains, or with which it is most nearly connected is unable to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 39-43, 45-49, and 51-55 are rejected for their dependence from the independent claims 28, 44, and 50, respectively.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 38-55 are rejected under 35 U.S.C. 102(e) as being anticipated by Sasaki (US 6,624,971):

Claims 38, 44 and 55, Sasaki shows a thin film head having a reading part 5 (Fig. 1A; column 10, line 58) and a recording part including: an upper magnetic pole 27 (Figs. 6 and 12); a lower magnetic pole having a lower magnetic main layer 7 (Fig. 6), a lower magnetic pole front end portion on the lower magnetic main layer, and a

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projection step portion on the lower magnetic pole front end portion; and a non-magnetic insulating layer on the lower magnetic main layer, which is formed at an opposite side to an air bearing surface of the projection step portion; wherein the projection step portion includes one portion which faces the upper magnetic pole and another portion which is wider than the one portion at a predetermined depth from the air bearing surface and which does not face the tip portion of the magnetic pole, the another portion having a width which is wider than a width of the one portion of the projection step portion at the air bearing surface; and Figs. 6 and 12 shows that a distance from the air bearing surface to a starting position line of the another portion of the projection step portion is shorter than a distance from the air bearing surface to the air bearing surface side edge of the upper magnetic pole which faces the one portion of the projection step portion.

With regard to claim 44, Sasaki further shows in Figs. 6 and 12 that a distance from a track center line of the upper magnetic pole to the air bearing surface side edge position of the upper magnetic pole is equal to a distance from the track center line of the projection step portion to a position on the starting position line.

With regard to claim 50, Sasaki further shows a gap layer 9 (Fig. 6) disposed between the upper magnetic pole and the projection step portion.

Claims 39, 45, and 51; Sasaki further shows in Fig. 6 that the another portion of the projection step portion is formed at both side of a track center line of the projection step portion.

Claims 40, 46, and 52; Sasaki further shows in Fig. 6 that the width of the projection step portion in the track width direction at the air bearing surface is

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substantially equal to a width in the track width direction of the upper magnetic pole at the air bearing surface.

Claims 41, 47, and 53; Sasaki further shows in Fig. 6 that a distance from a track center line of the projection step portion to an edge (the outmost edge) of the another portion of the step projection portion in track width direction at the predetermined depth from the air bearing surface is greater than a distance from a track center line of the upper magnetic pole to an edge (the intermediate edge) of the upper magnetic pole in the track width direction at the predetermined depth from the air bearing surface.

Claims 42, 48, and 54; Sasaki further shows in Fig. 6 that a distance from a track center line of the projection step portion to the outmost edge of the another portion of the projection step portion in a track width direction at a depth of the starting position line from the air bearing surface is greater than a distance from a track center line of the upper magnetic pole to an edge of the upper magnetic pole in the track width direction at the depth of the starting position line from the air bearing surface.

Claims 43, 49, and 55, Sasaki further shows in Fig. 6 that the another portion of the projection step portion has rectangular contours.

Response to Arguments

3. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection for the new claims.

Conclusion

4. The prior art made of record in PTYO-892 Form and not relied upon is considered pertinent to applicant's disclosure.

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5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is 571-272-7570. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


TIANJIE CHEN
PRIMARY EXAMINER